St Benedict's Catholic High School
1971

Core Maths intent statement

Year 12:

Half term 1	Half term 2	Half term 3	Half term 4	Half term 5
• Percentages • Interest rates • Repayments and the cost of credit • Taxation • Types of data • Collecting and sampling • Calculations on data	• Representing data diagrammatically • Fermi Estimation • Exploring the large data set • Using a spreadsheet	• Probabilities and estimation • Sample mean • Critical analysis • Normal distribution	• Correlation and regression • Normal distribution • Pre-release	Revision

Y12	Unit	Students will learn about:
Half term 1	Percentages	• Percentage of an amount • Percentage increase and decrease • Percentage change • Percentage profit and loss • Reverse percentages • VAT
	Interest rates	• Simple interest • Compound interest
	Repayments and the cost of credit	• APR • AER • Mortgages
	Taxation	• Income tax • National Insurance • Students loans
	Types of data	• Primary • Secondary • Qualitative • Quantitative • Discrete • Continuous
	Collecting and sampling	• Types of sampling including cluster, stratified, random, quota • Advantages & Disadvantages of each • Limitations of each
	Calculations on data	• Calculating the mean, median, mode, range, quartiles, interquartile range, percentiles and standard deviation • Interpreting the measures of location and spread in context • Using the calculator to find measures of location and spread where appropriate
Half term 2	Representing data diagrammatically	• Histograms (equal and unequal class widths) • Stem and leaf (inc back to back) • Cumulative frequency diagrams

		• Box and whisker plots • Frequency polygons
	Fermi estimation	• Fermi estimation
	Exploring a large data set	• Applying data analysis to large sets of data
	Using a spreadsheet	• Use of spreadsheets analysing sets of large data
Half term 3	Probabilities & estimation	• The difference between population and sample • Finding a simple random sample
	Sample Mean	• Language associated with sample mean (point estimate) • Understanding that accuracy is increased with increased sample size
	Critical Analysis	• Critically analyse arguments made by others • Sumarise information • Compare results from a model with real data
	Normal Distribution	• Properties of the Normal distribution • Finding probabilities for normal distributions • Standardising normally distributed data and using this to find probabilities
Half term 4	Correlation and regression	• Drawing and interpreting scatter graphs for bivariate data • Use and interpret the equation of the regression line • Calculating the PMCC and interpreting the result •
	Normal distribution	• Properties of the Normal distribution • Finding probabilities for normal distributions • Standardising normally distributed data and using this to find probabilities
	Pre-release	• Go over the prerelease and explore possible questions associated with it

Half term 5	Revision	• Topic revision progressing to complete papers

St Benedict's Catholic High School
1971